IPL AUCTION STRATEGY

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About Dataset

- data from the 1st season to the 13th season
- Consists of two tables
- Matches(17 attributes)
- Balls(17 attributes)

```
create table balls(
        id int,
        inning int,
        over int,
        ball int,
        batsman varchar,
        non_striker varchar,
        bowler varchar,
        batsman_runs int,
        extra_runs int,
        total_runs int,
        is_wicket int,
        dismissal_kind varchar,
        player_dismissed varchar,
        fielder varchar,
        extras_type varchar,
        batting_team varchar,
        bowling_team varchar
);
```

```
create table matches(
        id int,
        city varchar,
        date date,
        player_of_match varchar,
        venue varchar,
        neutral_venue int,
        team1 varchar,
        team2 varchar,
        toss_winner varchar,
        toss_decision varchar,
        winner varchar,
        result varchar,
        result_margin int,
        eliminator varchar,
        method varchar,
        umpire1 varchar,
        umpire2 varchar
);
```

Emphasis on types of players

- Batsman(Aggressive, Anchor, Finishers, Big Hitters, Rotators)
- Bowlers(Economical, Wicket-Taking)
- All Rounders
- Wicket Keepers

PLEASE NOTE (Important!)

- **The Queries have been done for the whole career and not on yearly basis.**
- It was not mentioned that we have to find queries on yearly basis or for the whole career playtime.

BATSMAN SEGMENT

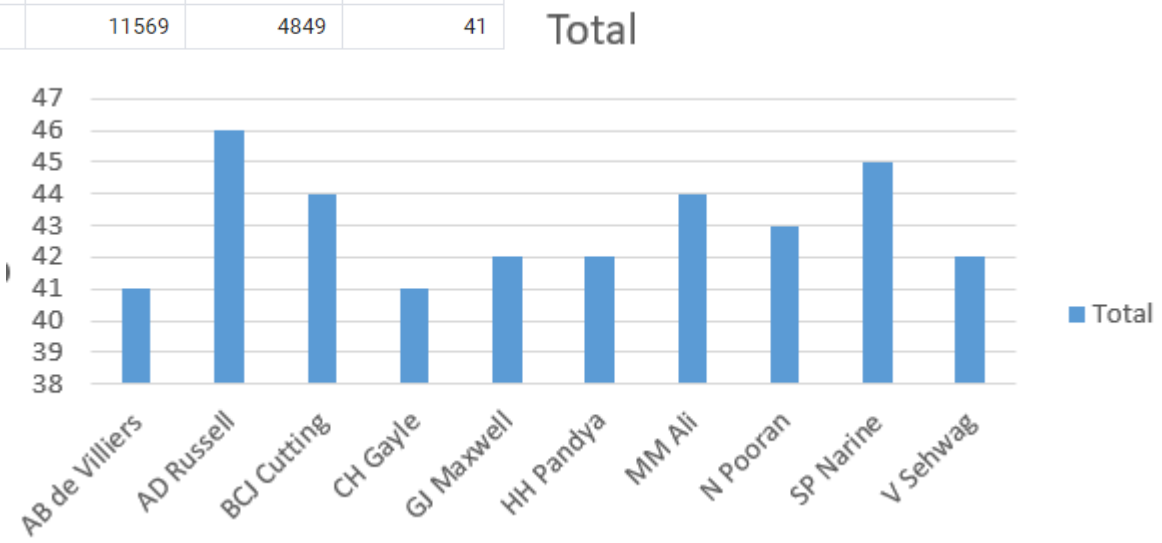
- AGGRESSIVE
- ANCHOR
- HARD-HITTERS

Aggressive Batsman

Top 10 batsman with high Strike Rate for their whole career in IPL

Each of them have played at least 500 balls.

	batsman character varying	total_balls bigint	total_runs bigint	strike_rate bigint
1	AD Russell	3231	1517	46
2	SP Narine	1948	892	45
3	MM Ali	694	309	44
4	BCJ Cutting	532	238	44
5	N Pooran	1197	521	43
6	V Sehwag	6386	2728	42
7	GJ Maxwell	3575	1505	42
8	HH Pandya	3143	1349	42
9	CH Gayle	11501	4772	41
10	AB de Villiers	11569	4849	41



select batsman, sum(ball) as total_balls ,sum(batsman_runs) as Total_runs, (sum(batsman_runs)*100/sum(ball)) as Strike_Rate from balls

where extras_type !='wides'

group by batsman having sum(ball)>=500 order by 4 desc limit 10;

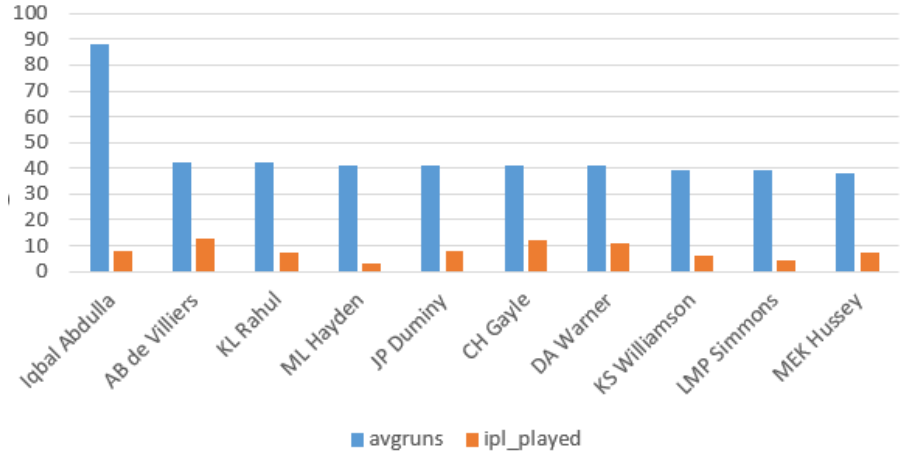
Anchor Batsman

Top 10 batsman with good averages for their whole career in IPL

Each of them have played more than 2 IPL(s).

```
select x.batsman, x.avgruns, y.IPL_played from (select batsman,
                Case
                                when sum(is_wicket)>0 then sum(batsman_runs)/sum(is_wicket)
                                else 0
                end as avgruns
from balls group by batsman ) as x
inner join
(select c.batsman, count(*) as IPL_Played from (select a.batsman, sum(a.ball) as Total_Balls, sum(a.batsman_runs) as
Total_runs,
(sum(a.batsman_runs)*100/sum(a.ball)) as Strike_Rate, Extract (Year from b.date)
from balls as a left join matches as b
on a.id=b.id
group by 5,1
order by 5) as c group by batsman having count(*)>2) as y
on x.batsman=y.batsman
order by 2 desc limit 10;
```

	batsman character varying	avgruns bigint	ipl_played bigint
1	Iqbal Abdulla	88	8
2	AB de Villiers	42	13
3	KL Rahul	42	7
4	ML Hayden	41	3
5	JP Duminy	41	8
6	CH Gayle	41	12
7	DA Warner	41	11
8	KS Williamson	39	6
9	LMP Simmons	39	4
10	MEK Hussey	38	7

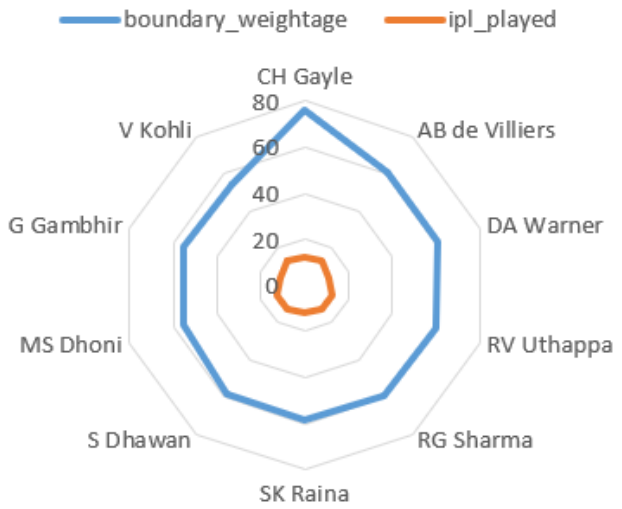


Hard Hitting Batsman

Top 10 batsman with most runs in boundaries for their whole career in IPL

Each of them have played more than 2 IPL(s).

	batsman character varying	boundary_weightage bigint	ipl_played bigint
1	CH Gayle	76	12
2	AB de Villiers	61	13
3	DA Warner	61	11
4	RV Uthappa	60	13
5	RG Sharma	59	13
6	SK Raina	58	12
7	S Dhawan	58	13
8	MS Dhoni	55	13
9	G Gambhir	55	11
10	V Kohli	54	13




```
select x.batsman, x.Boundary_Weightage, y.IPL_Played from
(select a.batsman, b.Total_Runs as Runs, a.Total_Boundaries as Boundaries_Runs, a.Total_Boundaries*100/b.total_Runs as
Boundary_Weightage from
(select batsman, sum(batsman_runs)as Total_Boundaries from balls where extras_type != 'wide' and batsman_runs>3 group by batsman order
by 2 desc) as a
inner join
(select batsman, sum(batsman_runs) as Total_Runs from balls where extras_type != 'wide' group by batsman ) as b
on a.batsman=b.batsman
order by 2 desc,4 desc limit 10) as x
inner join
(select c.batsman, count(*) as IPL_Played from (select a.batsman, sum(a.ball) as Total_Balls, sum(a.batsman_runs) as Total_runs,
(sum(a.batsman_runs)*100/sum(a.ball)) as Strike_Rate, Extract (Year from b.date)
from balls as a left join matches as b
on a.id=b.id
group by 5,1
order by 5) as c group by batsman having count(*)>2) as y
on x.batsman=y.batsman
order by 2 desc;
```

BOWLER SEGMENT

- ECONOMICAL
- WICKET-TAKING

Economical Bowlers

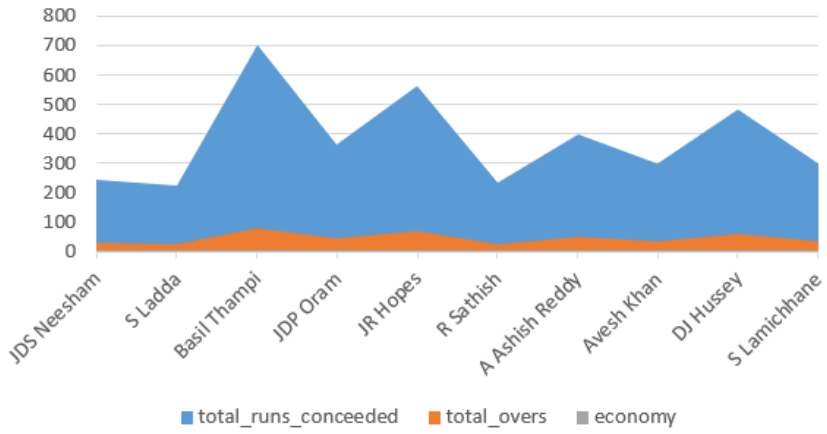





Top 10 Economical Bowlers for their whole career in IPL

Each of them have bowled atleast 500 balls in IPL so far.

	bowler character varying	total_runs_conceeded bigint	total_overs bigint	economy bigint
1	JDS Neesham	245	30	8
2	S Ladda	225	26	8
3	Basil Thampi	704	81	8
4	JDP Oram	362	45	8
5	JR Hopes	562	69	8
6	R Sathish	233	28	8
7	A Ashish Reddy	400	49	8
8	Avesh Khan	301	35	8
9	DJ Hussey	485	58	8
10	S Lamichhane	297	36	8



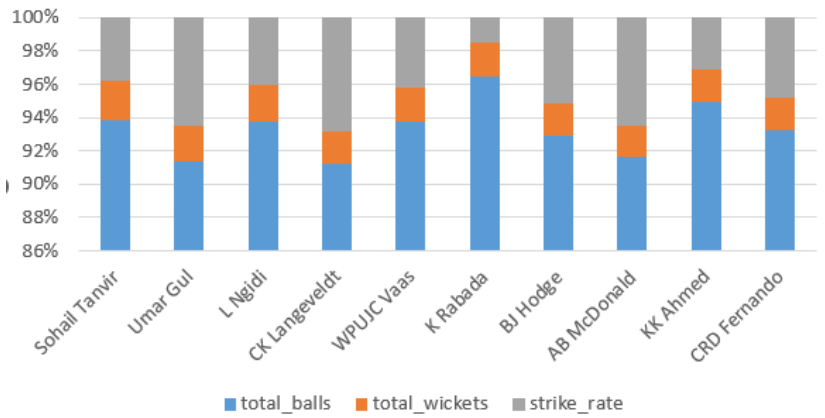

```
select bowler, sum(total_runs) as Total_Runs_Conceeded ,
sum(ball/6) as Total_Overs, sum(total_runs)/sum(ball/6) as
economy from balls
group by bowler having sum(ball)>=500
order by 4 desc limit 10;
```

Wicket Taking Bowlers

Top 10 Wicket Taking Bowlers for their whole career in IPL

Each of them have bowled atleast 500 balls in IPL so far with best Strike Rates.

	bowler character varying	total_balls bigint	total_wickets bigint	strike_rate bigint
1	Sohail Tanvir	982	24	40
2	Umar Gul	593	14	42
3	L Ngidi	993	23	43
4	CK Langeveldt	610	13	46
5	WPUJC Vaas	1023	22	46
6	K Rabada	3046	66	46
7	BJ Hodge	847	18	47
8	AB McDonald	665	14	47
9	KK Ahmed	1460	30	48
10	CRD Fernando	925	19	48




```
select bowler, sum(ball) as Total_Balls, sum(is_wicket) as
Total_wickets,sum(ball)/sum(is_wicket) as Strike_Rate
from balls group by bowler having sum(is_wicket)>0 and
sum(ball)>500
order by 4 asc limit 10;
```

ALL ROUNDERS SEGMENT

Top 10 All Rounders for their whole career in IPL

	all_rounders character varying	batting_sr bigint	bowling_sr bigint
1	AD Russell	46	63
2	SP Narine	45	69
3	MM Ali	44	67
4	BCJ Cutting	44	85
5	HH Pandya	42	74
6	V Sehwag	42	81
7	GJ Maxwell	42	99
8	CH Morris	41	63
9	SM Curran	41	68
10	CH Gayle	41	113

```
select a.batsman as All_Rounders, a.Strike_rate as Batting_SR, b.Strike_rate as Bowling_SR from (
                    select batsman, sum(ball) as total_balls ,sum(batsman_runs) as Total_runs,
(sum(batsman_runs)*100/sum(ball)) as Strike_Rate from balls
where extras_type !='wides'
group by batsman having sum(ball)>=500
) as a
inner join
(select bowler, sum(ball) as Total_Balls, sum(is_wicket) as Total_wickets,sum(ball)/sum(is_wicket) as
Strike_Rate
from balls group by bowler having sum(is_wicket)>0 and sum(ball)>300
) as b
on a.batsman = b.bowler
order by 2 desc,3 asc limit 10;
```

Taking Batting SR as a dominant factor

	all_rounders character varying	batting_sr bigint	bowling_sr bigint
1	K Rabada	24	46
2	BJ Hodge	34	47
3	A Ashish Reddy	39	50
4	N Rana	37	55
5	DJ Bravo	34	59
6	RS Bopara	34	59
7	MR Marsh	31	59
8	Gurkeerat Singh	32	60
9	JEC Franklin	32	61
10	R Vinay Kumar	27	61

```
select a.batsman as All_Rounders, a.Strike_rate as Batting_SR, b.Strike_rate as Bowling_SR from (
                    select batsman, sum(ball) as total_balls ,sum(batsman_runs) as Total_runs,
(sum(batsman_runs)*100/sum(ball)) as Strike_Rate from balls
where extras_type !='wides'
group by batsman having sum(ball)>=500
) as a
inner join
(select bowler, sum(ball) as Total_Balls, sum(is_wicket) as Total_wickets,sum(ball)/sum(is_wicket) as
Strike_Rate
from balls group by bowler having sum(is_wicket)>0 and sum(ball)>300
) as b
on a.batsman = b.bowler
order by 3 asc,2 desc limit 10;
```

Taking Bowling SR as a dominant factor

Wicket Keeper Segment

Top 10 Wicket Keepers for their whole career in IPL

	fielder character varying	catches bigint
1	MS Dhoni	164
2	KD Karthik	156
3	RV Uthappa	123
4	AB de Villiers	117
5	SK Raina	105
6	RG Sharma	92
7	PA Patel	91
8	KA Pollard	88
9	V Kohli	83
10	WP Saha	83

Top 10 players who caught balls maximum times

```
select fielder, count(*) as Catches
from balls where fielder !='NA'
group by fielder order by 2 desc
limit 10;
```

Dashboard

- Interface of all the joining Charts and graphs
- Helps the Management to dynamically visualize charts

Additional questions queries

--Count of cities that have hosted an IPL match

select city, count(city) as Total_Matches from matches group by city order by 2 desc;

#1

#2

```
--Creating Table deliveries_v02
create table deliveries_v02(
                        id int,
                        inning int,
                        over int,
                        ball int,
                        batsman varchar,
                        non_striker varchar,
                        bowler varchar,
                        batsman_runs int,
                        extra_runs int,
                        total_runs int,
                        is_wicket int,
                        dismissal_kind varchar,
                        player_dismissed varchar,
                        fielder varchar,
                        extras_type varchar,
                        batting_team varchar,
                        bowling_team varchar,
                        ball_result varchar GENERATED ALWAYS AS (
                                        case
```

#3

```
--Inserting all the values from Balls Table
insert into deliveries_v02 select * from balls;

select * from deliveries_v02;

--query to fetch the total number of boundaries and dot balls from the deliveries_v02 table
select ball_result, count(*) from deliveries_v02 group by ball_result having ball_result='dot' or ball_result='boundary';

--query to fetch the total number of boundaries scored by each team (descending order)
select batting_team, count(*) from deliveries_v02 group by ball_result,batting_team having ball_result='boundary' order by 2 desc;

--query to fetch the total number of dot balls bowled by each team (descending order)
select batting_team, count(*) from deliveries_v02 group by ball_result,batting_team having ball_result='dot' order by 2 desc;

--query to fetch the total number of dismissals by dismissal kinds where dismissal kind is not NA
select dismissal_kind, count(*) from deliveries_v02 group by dismissal_kind having dismissal_kind !='NA';

--query to get the top 5 bowlers who conceded maximum extra runs from the deliveries table
select bowler, sum(extra_runs) as extra_runs from deliveries_v02 group by bowler order by 2 desc limit 5;
```

#4

```
create table deliveries_v03(
                id int,
                inning int,
                over int,
                ball int,
                batsman varchar,
                non_striker varchar,
                bowler varchar,
                batsman_runs int,
                extra_runs int,
                total_runs int,
                is_wicket int,
                dismissal_kind varchar,
                player_dismissed varchar,
                fielder varchar,
                extras_type varchar,
                batting_team varchar,
                bowling_team varchar,
                ball_result varchar,
                venue varchar,
                date date
                );
```

#5

```
--Joins of the two tables
select a.*, b.venue, b.date from deliveries_v02 as a inner join matches as b
on a.id=b.id

--insertion of values into deliveries_v03 table
insert into deliveries_v03 select a.*, b.venue, b.date from
deliveries_v02 as a inner join matches as b
on a.id=b.id;

--query to fetch the total runs scored for each venue and order it in the descending order of total runs scored
select venue,sum(total_runs) as Total_runs from deliveries_v03 group by venue order by 2 desc;

--query to fetch the year-wise total runs scored at Eden Garden and order it in descening order of total runs scored
select Extract(year from date) as year, venue, sum(total_runs) as Total_runs from deliveries_v03 where venue='Eden Gardens'
group by year, venue order by 3 desc;
```

Thank You